

families



air quality



environmental justice



ENVIRONMENTAL JUSTICE BUS TOUR AND COMMUNITY FORUM

Friday, April 13th, 2012

Bus Tour Leaders/Presenters:

Luis Olmedo, Executive Director, Comité Civico del Valle

Lisa Arkin, Executive Director, Beyond Toxics

Alison Guzman, Environmental Justice Outreach Coordinator, Beyond Toxics

Event Sponsors:

U.S. Environmental Protection Agency

Bethel School District

City of Eugene Human Rights Commission

and



Special Thanks to Organically Grown, Coconut Bliss, Glory Bee, McKenzie Mist

A collaboration between...



and



Beyond Toxics works to guarantee environmental protections and health for all communities and residents. We expose root causes of toxic pollution and help communities find effective, lasting solutions.

www.BeyondToxics.org | 541-465-8860 | info@BeyondToxics.org

Introduction

p. 1

Welcome to the West Eugene Environmental Justice Bus Tour! We believe you have joined the bus tour to learn more about environmental justice in our community, children's health in the Bethel School District, local concerns about air quality, and the relationship between pollution and health.

What is clean air?

Beyond Toxics has been an active partner with various West Eugene neighborhood groups for almost a decade. We have learned that one of the critical issues that the residents care about is the quality of their local air and its relationship to the health of their family. We have been told many times that the air in West Eugene is different, that it is "bad." Few people realize that only 6 air pollutants – a small subset of the hundreds of chemicals in our local air – are regulated. When we think of what federal regulations exist to protect our air, it is important to know that the government has not yet established enforceable air quality standards for the vast majority of air toxics that are saturating our local airshed – carcinogens, neurotoxins and more. In other words, there are few, if any, limits on many air toxics. Furthermore, "clean air" laws do not protect residents living closest to multiple pollution sources who are exposed to long-term concentrated and synergistic exposures. There is no requirement to reduce additive sources of air toxics for nearby homes and schools.

Did You Know?

Fairfield and Malabon Elementary Schools are ranked in the worst 12%-13% nationwide for school children exposed to carcinogens and air toxics because of cumulative levels of air toxics?

JH Baxter and Flakeboard are ranked as high health risks from the US EPA?

Eleven out of 15 West Eugene factories emit methanol into the air each year (99,236 pounds) – causing breathing problems, sleep disorders and abdominal pain. However, there is no health risk assessment of cumulative methanol exposures on children.

For these reasons, Beyond Toxics analyzed multiple and cumulative air toxic exposures for vulnerable neighborhoods in West Eugene. We found that children in Bethel neighborhoods are chronically exposed to high levels of air toxics. For example, consider these facts for West Eugene:

According to the Eugene Toxics Reporting system Bethel school children each breathe approximately 72 pounds of toxic chemicals every year – this is the same as each student potentially inhaling the volume of 144 large helium balloons of toxic chemicals!

What is Environmental Justice?

Environmental justice is ensuring equal human health and environment protection for everyone – with special consideration for communities that are disproportionately burdened by environmental pollution and who are economically and social distressed. According to the EPA, "minority and/or low-income communities frequently may be exposed disproportionately to environmental harms and risks." President Clinton issues the 1994 Presidential Executive Order to address environmental justice in minority and low-income communities calling for an active commitment to create opportunities to participate meaningfully in the development, implementation and enforcement of environmental laws, regulations and policies.

Do we have Environmental Justice Communities here in Eugene?

The research conducted by Beyond Toxics and Cento LatinoAmericano shows that West Eugene is an environmental justice community. When compared to other Eugene neighborhoods, residents in West Eugene have:

- 1) Disproportionate exposure to air toxics -- 99% of all Eugene's air toxics are located in West Eugene (97402).
- 2) Higher percentage of poverty/ low-income: 26%-38% of residents in the Industrial Corridor live at or below poverty level (<\$13,500), compared to 17% in 97405 area.
- 3) Higher percentage of minority residents: An average of 13% of residents in West Eugene are Latino, compared to an average of 7.8% for all of Eugene.



About the guest presenter and facilitator...

Luis Olmedo is the Executive Director of Comite Civico del Valle, an organization located in Imperial Valley whose mission focuses on addressing environmental health related problems in the farm worker community. Luis has an established reputation as a leading community activist and advises local, regional, and state programs on environmental health issues affecting Imperial County and Eastern Coachella Valley.

Introduction, cont.

How Can Environmental Justice be Achieved?

The City of Eugene, state, county and local agencies, schools and business owners must engage in a systematic, community-based approach to involve residents in lasting solutions to public health issues. Reducing the incidence of children's asthma is a top priority. The residents of West Eugene whose lives are affected by air pollution must have a seat at the table. West Eugene neighborhoods already

have developed strong community leaders and a community vision. Next steps must involve multi-stakeholder processes, consensus building and an alternative dispute resolution process – all under the mantle of environmental justice. Together, let us recognize the undue environmental health burdens in West Eugene and prioritize children's health and well-being as a jointly held obligation.

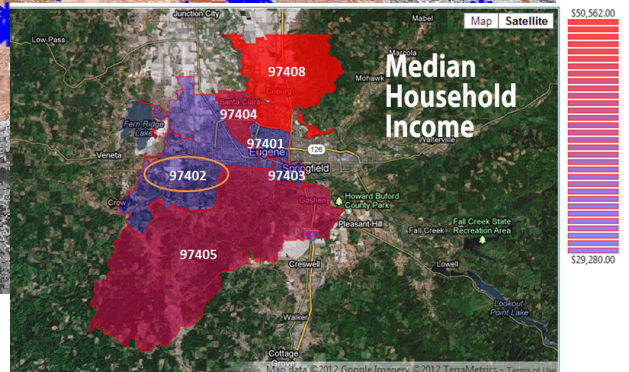
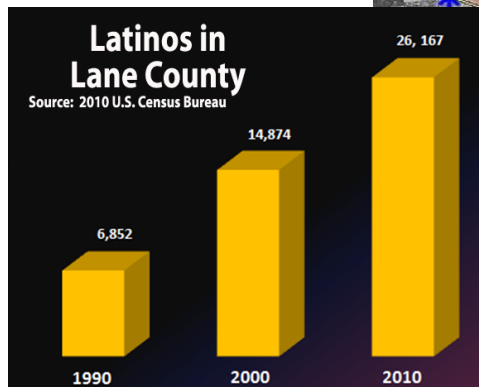
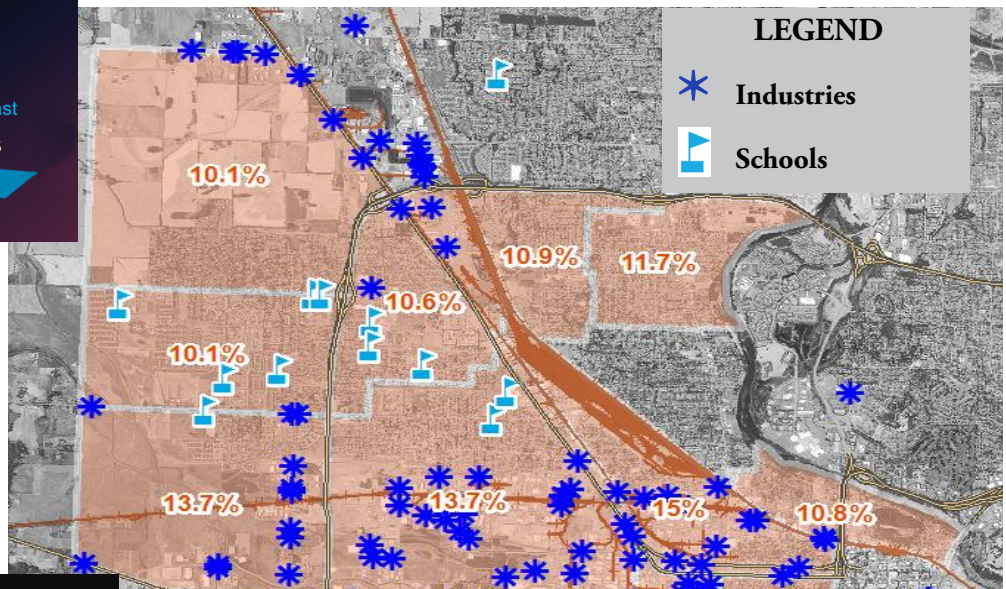
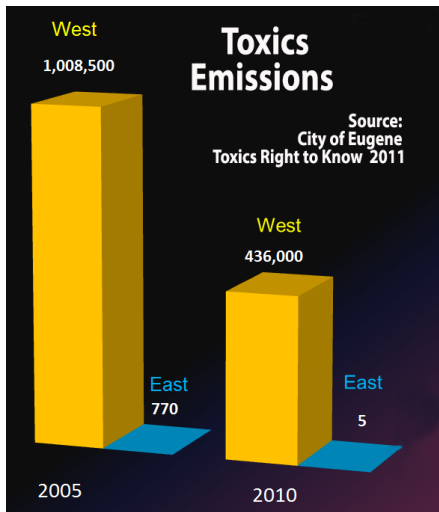
Latino Students in West Eugene

School	Hispanic Students
Fairfield Elem.	36%
Danebo Elem.	25%
Praire Mountain	23%
Cascade Middle	21%
Willamette HS	17%
Kalapuya HS	15%
Shasta Middle	14%
Clear Lake Elem.	13%
Irving Elem.	07%
South Eugene HS	4.2%

Source: Bethel School District

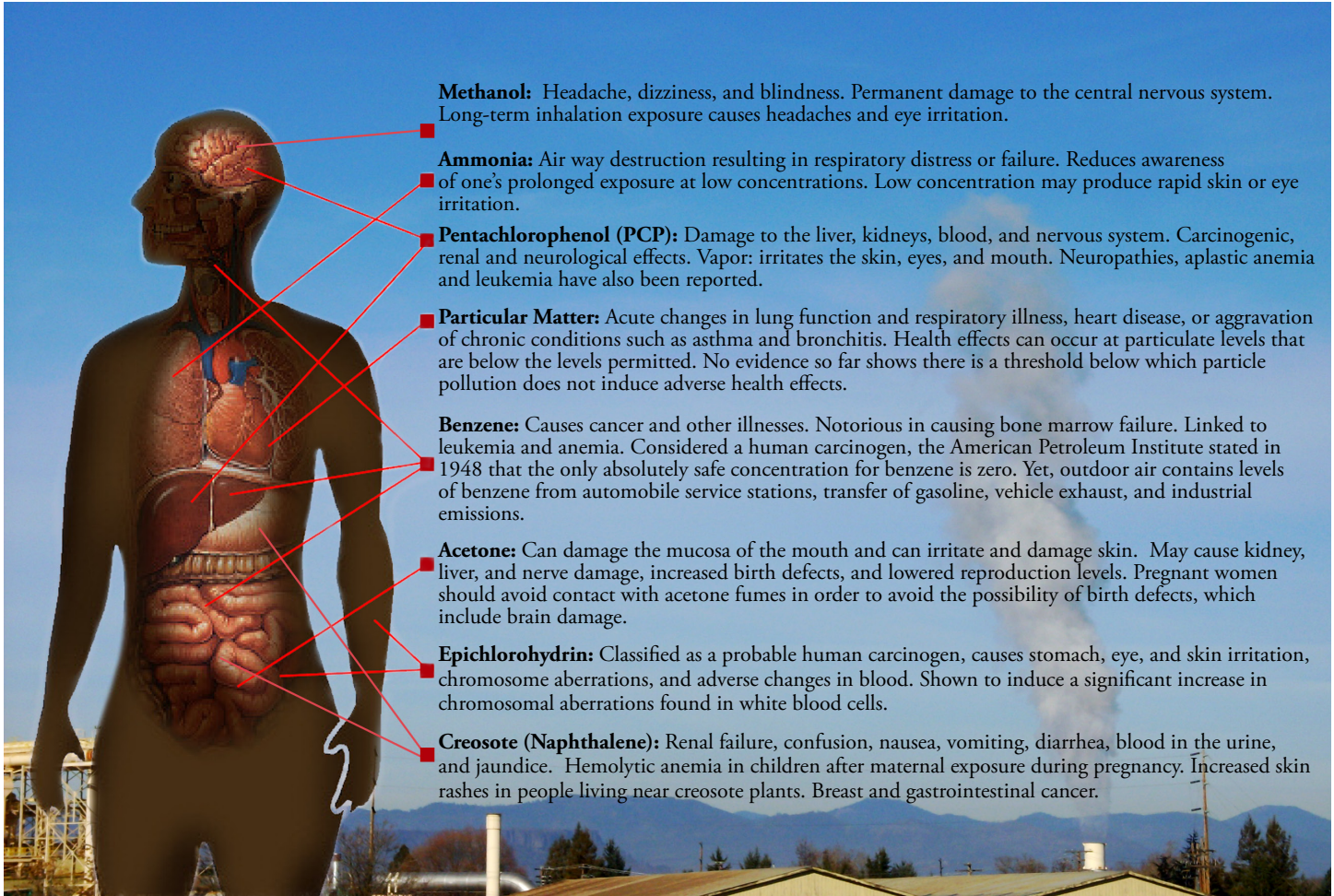
What Makes West Eugene an Environmental Justice Community?

Percentages of Latinos in Population (source: U.S. Census Bureau)



Toxic chemicals target your organs and body for serious harm

Children bear the greatest burden



New research shows that low-level exposures to toxic chemicals that disrupt hormones do not fit the typical dose-response curve. Moderate and low level exposures may be as damaging or more damaging than high doses.

"In the last 40 years, we have learned that serious health effects of air pollutants are experienced at levels much lower than previously considered "safe" levels of exposure, particularly for vulnerable populations such as infants, children ... (a) given dose of a pollutant will have a greater impact on a child than on an adult not only due to their smaller size, but because of the nature of their growing bodies and minds. At sensitive points in child development, environmental exposures can have especially harmful effects...."

In fact, air pollution is associated with impaired lung growth that may have permanent, lifelong impacts on an individual's ability to breathe. These impacts can have health consequences and impose increased health costs across the lifespan."

(American Academy of Pediatrics: Clean Air and Public Health 6/2011)

"Whether low doses of endocrine disrupting chemicals influence certain human disorders is no longer conjecture ... environmental exposures are associated with human diseases and disabilities. We conclude that the effects of low doses cannot be predicted by the effects observed at high doses. Thus, fundamental changes in chemical testing and safety determination are needed to protect human health." (Endocrine Reviews 33: 2012)

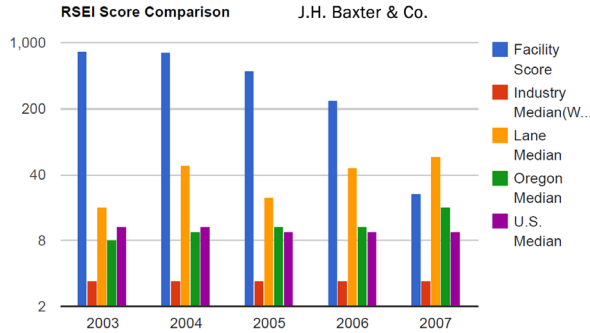
JH BAXTER

85 N. Baxter Rd. | Eugene, OR



Built 1946.
 Employs: 20 to 49 people.
 Annual revenue: \$20 to 50 million.
 Residential exposure: 7000 residents live within 1 mile.

2007 EPA Risk Screening shows health hazards from Baxter were double the risk of the U.S. median.



Recent History of Non-Compliance

Date	Violation	Action Taken
12/7/2001	LRAPA DECLARES JHB "A SUSPECTED NUISANCE"	NO ACTION
11/11/2004	POLLUTED AIR IN EXCESS OF PERMIT - 762 COMPLAINTS	FINED \$2,184
2/10/2005	LRAPA ESTABLISHES BEST WORK PRACTICE AGREEMENT	ADD POLLUTION CONTROLS
9/17/2007	POLLUTED AIR WITH PARTICULATE MATTER EMISSIONS IN EXCESS OF PERMIT	FINED \$800
2/18/2008	FIRE IN POLLUTION CONTROL EQUIPMENT. JHB DID NOT REPORT FOR OVER 8 HRS. CONTINUED OPERATING WITHOUT CONTROL EQUIPMENT FOR 51 DAYS, RESULTING IN NEARLY DOUBLING CREOSOTE AND PENTACHLOROPHENOL EMISSIONS.	NO ACTION TAKEN
11/9/2010	EXCESS EMISSIONS CAUSING "INJURY, DETRIMENT TO PUBLIC SAFETY;" CONCEALMENT AND MASKING OF EMISSIONS:	SUBMIT A RESPONSE BY 3/5/2012
5/10/2011	VIOLATION OF AIR PERMIT - FAILURE TO PERFORM REQUIRED TESTING	FINED \$6,126
9/13/2011	VIOLATION OF AIR PERMIT - EXCESS POLLUTION EMISSIONS	SUBMIT A RESPONSE BY 2/24/2012

BAXTER'S: WOOD TREATMENT AND CHEMICAL MANUFACTURING PLANT

Agency reporting	Total pounds of air toxics (latest available data)	Top 3 Chemicals	Health Effects
TRI	37,335 (Ammonia, creosote)	AMMONIA	RESPIRATORY PROBLEMS, EXTREME FATIGUE
LRAPA	76,000	PENTACHLOROPHENOL	CARCINOGEN, MISCARRIAGES, NEUROLOGICAL EFFECTS
EUGENE	8 **	CREOSOTE (NAPHTHALENE)	CARCINOGEN, NEUROLOGICAL EFFECTS, ANEMIA

Facility distance to nearest school: **.6 miles** (Fairfield Elem.)



Pollution History:

Superfund site; 2,485 community complaints were filed with Air Authority since 2003; over 140 complaints in the last 2 years. Groundwater contamination (PCP and PAH's) extends off the site 2,500 feet west and northwest of the facility.

Public Health:

Most emissions are 36,000 lbs. of uncontrolled "fugitive" ammonia.

** **Note:** Baxter refuses to report creosote compounds (i.e., naphthalene) to Eugene Toxics Reporting, claiming exemption under FIFRA. However, EPA reports 943 lbs. creosote released (TRI 2010) "probable human carcinogen;" 250 lbs. Pentachlorophenol (TRI 2008), both are carcinogens. ATSDR reports naphthalene in 100% of the neighborhood's air samples in excess of EPA health benchmarks.

Facility distance to nearest homes: **100 ft (Cross St.)**



TRAINSONG/UNION PACIFIC RAILYARD



Rail Yard Ground Water and Air Pollution:

In 1994, an environmental investigation of the Union Pacific Railroad (UPRR) Yard led to the discovery of groundwater contamination. Industrial solvents poisoned private wells and toxic vapors traveled through the ground into homes. Neighbors also observed that the outdoor air in Trainsong neighborhood had a “sickly sweet” or pungent “chemical” smell. The Superfund Health Investigation and Education Program confirmed that air contaminated with solvent chemicals is entering the crawlspaces of some homes in these neighborhoods that exceeded public health and safety standards. The solvents, vinyl chloride, PCE and TCE, are classified as probable human carcinogens.



Industrial Surface and Ground Water Pollution:

The area around the rail yard has many perennial ponds and seasonal wetlands as well as a high water table. Water pollution affects multiple sites that are hydrologically connected. Pacific Recycling was recently cited for polluting surface water with toxic chemicals from uncontrolled run-off from their metals recycling yard. The company has since made significant changes to reduce surface/ground water contamination. Other industrial sites in the area may also contribute to problems of water pollution, in particular various auto wrecking yards. Pollution in ground and surface water can volatilize into the air as inhalable pollutants.

Diesel Particulate and Dust:

Residents of Trainsong and River Road neighborhoods are exceptionally concerned about diesel particulate from diesel locomotives. Pollution transported by wind and air currents is inhaled by people before and after the particles have fallen onto the land. The US EPA classified diesel particulate pollution as likely to be carcinogenic to people. It is also associated with pre-term births, lower birth weight, asthma, pneumonia and heart disease.

Pesticides:

The Union Pacific Railroad routinely sprays herbicides along the length of its tracks. This practice creates a problem of chemical drift and trespass and can pose a public health risk.



Surface water from auto wrecking yard flows to perennial ponds near Trainsong neighborhood can contain petroleum, solvents and heavy metals.

Facility distance to nearest homes: a few yards



TRAINSONG/UP RAILYARD: DATA FOR AREA RESIDENTS

Per Capita Income Level	Percentage Latino Population	Percentage of families living at or below poverty level
\$14,515	20%	28%

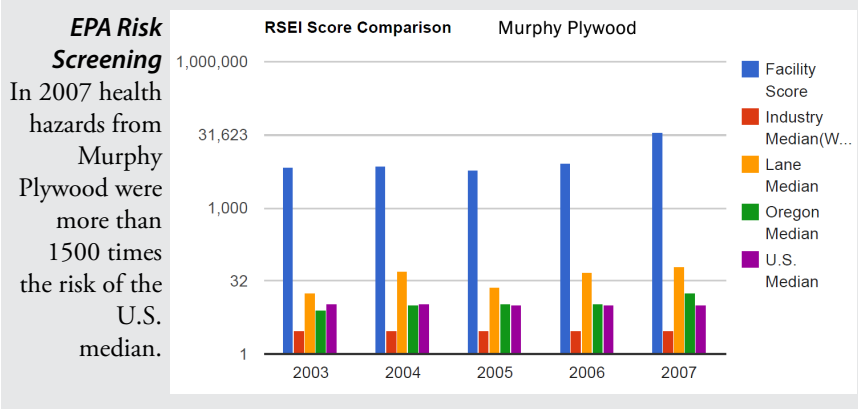
MURPHY PLYWOOD

2350 Prairie Road, | Eugene Oregon 97402



Established in 1986.

Approximate number of employees: 100-249



MURPHY PLYWOOD: WOOD TREATMENT AND CHEMICAL MANUFACTURING PLANT

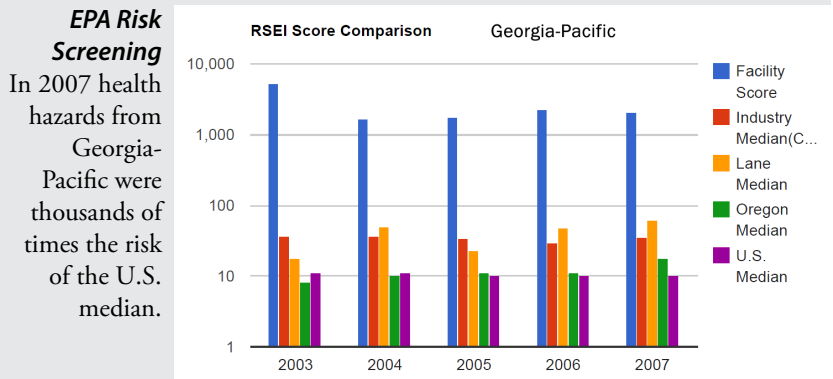
Agency reporting	Total pounds of air toxics (latest available data)
TRI	27,719 (Methanol, formaldehyde)
LRAPA	198,000
EUGENE	No TRTK Report

Top 3 Chemicals	Health Effects
METHANOL	LOSS OF VISION, SEVERE BODY PAIN, SLEEP DISORDERS
FORMALDEHYDE	CARCINOGEN, ALLERGEN, ASTHMA TRIGGER,
AMMONIA	RESPIRATORY PROBLEMS, EXTREME FATIGUE

Murphy Plywood is one of the area's major emitters of methanol at nearly 14,000 pounds/year. The plywood maker has estimated 29 tons of PM 2.5 emissions (finest particulate that lodges very deep in lung tissue and poses significant health risks); in addition they emit 34 tons of PM 10 (fine particles) for a total of 63 tons of particulate pollution. In 2002, the facility was found in violation for excess PM emissions. They are allowed to emit 74,000 tons of greenhouse gases yearly.



2665 Highway 99 N. | Eugene, OR 97402



Acquired by Koch Industries in 2005.
Number of employees: 35.

GEORGIA-PACIFIC: PLASTICS AND RESINS MANUFACTURING PLANT

Agency reporting	Total pounds of air toxics (latest available data)
TRI	5,174
LRAPA	36,000
EUGENE	No TRTK Report

Top 3 Chemicals	Health Effects
EPICHLOROHYDRIN	CARCINOGEN, LIVER, LUNG, AND KIDNEY PROBLEMS, STERILITY
PHENYL	LOSS OF APPETITE, LIVER AND KIDNEY DAMAGE, PROBLEMS OF INGESTION
METHANOL	LOSS OF VISION, SEVERE BODY PAIN, SLEEP DISORDERS

SENECA SAWMILL CO.

90201 Highway 99 N. | Eugene, OR 97402

Pollution History:

Seneca Sawmill's 20-MW biomass power plant near Eugene failed initial control test for particulate and nitrogen oxide emissions; company will conduct more detailed test by 10/12/2011 and has requested modification of monitoring requirements. The \$50 million biomass plant generates up to 20 megawatts of power and consumes about 30 truckloads per day of biomass (Register-Guard 9/2010).

Public Health:

In addition to significant carbon and nitrogen oxide releases, the biomass plant emits 39 separate toxic chemicals, many of which are carcinogens (e.g. dioxins) and heavy metals (e.g. lead and mercury).



Employs: over 250 employees
Annual sales: up to \$24,999,999

*** Health Note:**

Nearly every industrial facility in West Eugene emits carbon monoxide, nitrogen oxide, sulfur dioxide, volatile organic compounds and particulate matter in hundreds of tons individually and thousands of tons in the aggregate annually . This kind of exposure has been linked by the American Lung Association to numerous diseases and medical conditions: cancer, cardiopulmonary diseases including heart attacks, strokes, premature death, birth defects, abnormal lung development in children and increased frequency of emergency room visits.

SENECA SAWMILL: WOOD PRODUCTS INDUSTRY

Agency reporting	Total pounds of air toxics (latest available data)	Top 3 Chemicals*	Health Effects
TRI	No TRI Report	ACROLEIN	GENERAL RESPIRATORY CONGESTION AND EYE, NOSE, AND THROAT IRRITATION
LRAPA	73,200 - RR	STYRENE	INCREASED RISK OF LEUKEMIA AND LYMPHOMA; LIVER, KIDNEY, AND EYE AND NASAL IRRITATION
EUGENE	No TRTK Report	FORMALDEHYDE	CARCINOGEN, ALLERGEN, ASTHMA TRIGGER

SENECA SUSTAINABLE ENERGY: BIOMASS ENERGY GENERATION

Agency reporting	Total pounds of air toxics (latest available data)	Top 3 Chemicals*	Health Effects
TRI	No TRI Report	ACROLEIN	GENERAL RESPIRATORY CONGESTION AND EYE, NOSE, AND THROAT IRRITATION
LRAPA	17,800 - RR	STYRENE	INCREASED RISK OF LEUKEMIA AND LYMPHOMA; LIVER, KIDNEY, AND EYE AND NASAL IRRITATION
EUGENE	No TRTK Report	FORMALDEHYDE	CARCINOGEN, ALLERGEN, ASTHMA TRIGGER

Housing proximity to Seneca Sawmill: 1500 ft (Enid St)



SENECA SAWMILL: PROXIMITY TO NEARBY SCHOOLS

	Irving Elementary School	Willamette High School	Spring Creek Elementary School
Distance to Facility	1.5 mi E	2.4 mi S	1.9 mi E

HWY 99 CORRIDOR

Includes: States Industries, McFarland Cascade

STATES INDUSTRY: HARDWOOD PANEL PRODUCTS

Top 3 Chemicals	Health Effects
ACETONE	KIDNEY DAMAGE, BREATHING PROBLEMS, LOW BLOOD PRESSURE
METHANOL	LOSS OF VISION, SEVERE BODY PAIN, SLEEP DISORDERS
CUMENE	CARCINOGEN, SKIN RASH, REPRODUCTIVE PROBLEMS

Agency reporting	Total pounds of air toxics (latest available data)
TRI	No TRI Report
LRAPA	42,800
EUGENE	7517 (2007)



States Industries pictured above.
29545 East Enid Road in Eugene, OR 97402.

States Industries
In violation of RCRA permit 7 quarters in a row throughout 2010-2011.

Result: No fines.

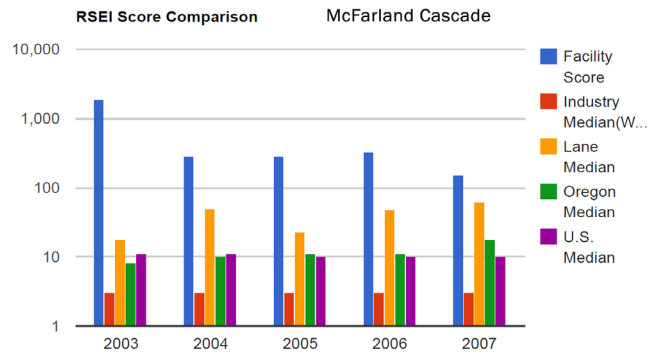


McFarland Cascade pictured on left.
90049 Hwy 99 N. | Eugene, OR 97402

Employs the equivalent of 10 or more full-time employees

Annual Revenue: over \$120 million

Public Health:
EPA Risk Screening – in 2007 health hazards from McFarland were approx. double the risk of the U.S. Median, probably due to dioxin and PCP emissions; In 2001, 2006 as much as 40 grams of dioxin & 92 lbs of PCP released thru “catastrophic events” (above conventional reporting). Dioxin discharged directly to local airshed and Willamette Watershed.



MCFARLAND CASCADE: WOOD POLES AND LUMBER

Agency reporting	Total pounds of air toxics (latest available data)
TRI	209 (Pentachlorophenol)
LRAPA	40,734
EUGENE	No TRTK Report

Top 3 Chemicals	Health Effects
HEXACHLOROBENZENE	NEUROLOGICAL, TERATOGENIC, LIVER, AND IMMUNE SYSTEM EFFECTS
PENTACHLOROPHENOL	CARCINOGEN, MISCARRIAGES, NEUROLOGICAL EFFECTS
DIOXIN	IMPAIRMENT OF IMMUNE SYSTEM, THE DEVELOPING NERVOUS SYSTEM, ENDOCRINE SYSTEM AND REPRODUCTIVE FUNCTIONS

Date	Violation	Action Taken
10/1/2008	Excess releases of formaldehyde	Civil penalty - \$13,750
4/19/2001	Excess releases of particulates	No action
6/21/2000	Excess releases of particulates	No action
5/7/1998	Violations of the Prevention of Significant Deterioration	Required more pollution control

WILLAMETTE INDUSTRIES, INC.

50 N. Danebo Ave.
Eugene, OR 97402



EPA Risk Screening – in 2007 health hazards from Flakeboard were more than 1500 times the risk of the U.S. median.



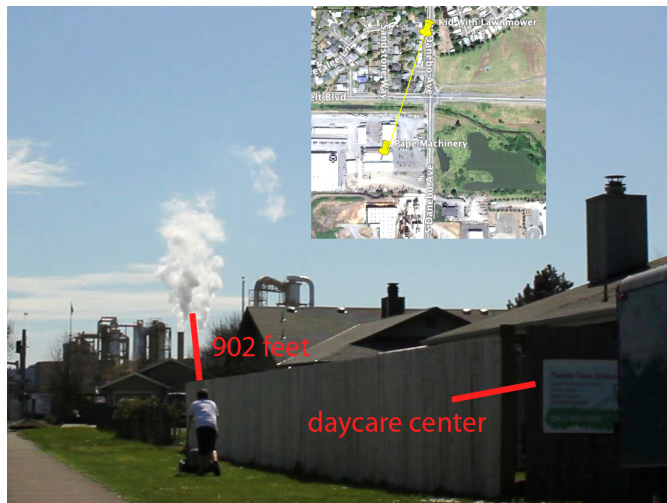
Employs 50 to 99

Annual Revenue: \$584.2 Million

FLAKEBOARD: MANUFACTURE OF PARTICLEBOARD & MEDIUM DENSITY FIBERBOARD (MDF)

Agency reporting	Total pounds of air toxics (latest available data)
TRI	112,530 (Methanol)
LRAPA	220,800
EUGENE	79,074

Top 3 Chemicals	Health Effects
METHANOL	LOSS OF VISION, SEVERE BODY PAIN, SLEEP DISORDERS
FORMALDEHYDE	CARCINOGEN, ALLERGEN, ASTHMA TRIGGER
AMMONIA	RESPIRATORY PROBLEMS, EXTREME FATIGUE



Pollution History:

Flakeboard releases Formaldehyde and Methanol, according to TRI and USA Today. According to Scorecard 2002, Flakeboard was considered one of the dirtiest/worst facilities in US, being in the top 90 percentile of facilities that emit air releases of recognized carcinogens. They have stopped using formaldehyde in their facility, but the US EPA reports that the facility will release 112,530 pounds of methanol and is projected to treat 13,523 pounds of methanol on their site in 2012. Methanol depresses the nervous system and can cause permanent blindness or death. Source: EPA, HHS

FLAKEBOARD: PROXIMITY TO NEARBY SCHOOLS

	Sunshine Preschool & All Day	Kalapuya High School	Danebo Elementary School
Distance to Facility	.7 mi NE	.9 mi N	1.1 mi N

Facility distance to nearest homes: 500 ft (Morely Loop)

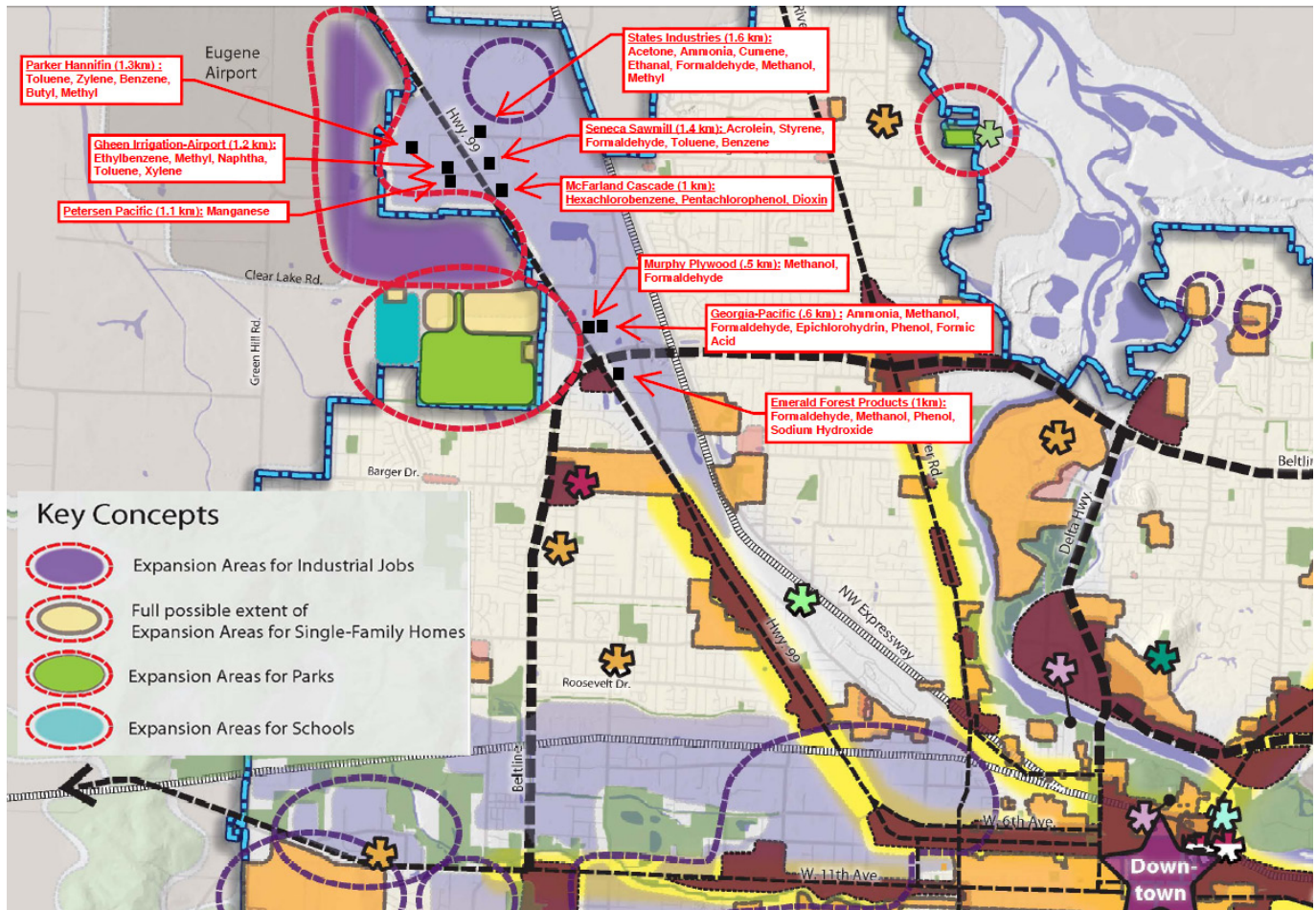


Envision Eugene

"In the years ahead, I want to see a full-scale revitalization of what we do and how we think about environmental justice. This is not an issue we can afford to relegate to the margins. It has to be part of our thinking in every decision we make."

- EPA Administrator Lisa Jackson, 2009

Environmental Health Factors: Placing Homes, Schools and Parks in Industrial Corridors



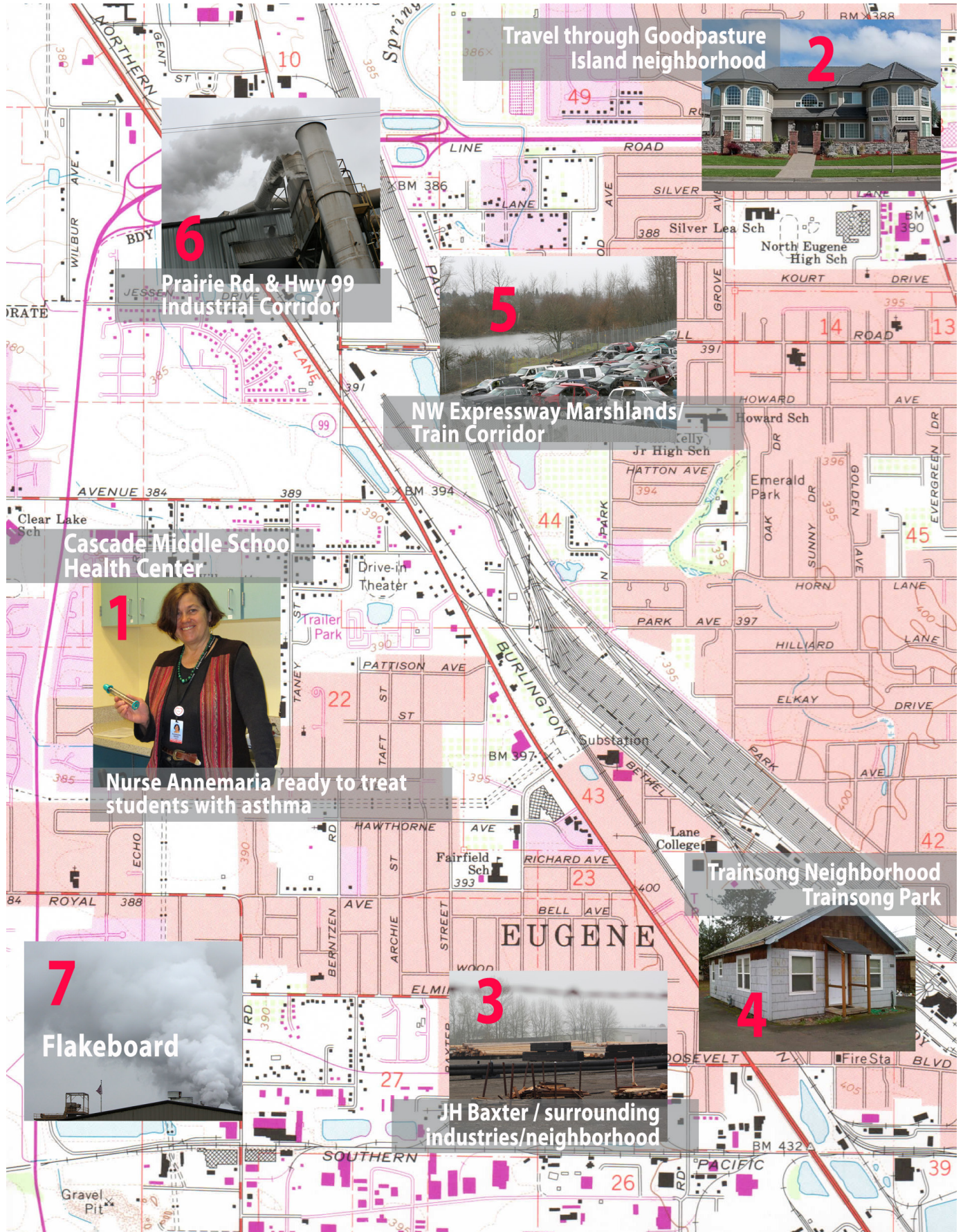
How might Envision Eugene integrate environmental justice as a community value that informs future land use decisions? The first step starts with recognizing the public health vulnerability of the existing West Eugene neighborhoods. Incorporating air toxics data and environmental health research will help inform land use decisions.

In the ongoing debate over economics versus environmental health, we frequently hear the claim that "the industries were there first, and people later chose

to move into the area." Contrary to popular lore, industry didn't necessarily precede the location of homes and schools. Historical maps of Eugene's early settlement patterns show that by 1910, Bethel school and surrounding homes sites were established in West Eugene, long before today's industrial sites (other than the rail yard). By 1940, Danebo and River Road Schools were added to serve a growing population in West Eugene. JH Baxter was built in 1946. In that same year, more schools and homes were built in the Trainsong, Bethel and River Road areas.

This version of the Envision Eugene map gives an environmental justice perspective to the proposed expansion area for single family homes, parks and schools in West Eugene. What low-level, chronic and synergistic toxic exposures would the families who locate in the new areas face from existing industries as well as the new industrial area immediately to the north? Will the Eugene airport expand in the foreseeable future? How shall we as a community think about locating residential and industrial areas?

Environmental Justice Bus Tour Route



Travel through Goodpasture Island neighborhood

2



Prairie Rd. & Hwy 99 Industrial Corridor

6



NW Expressway Marshlands/Train Corridor

5

Cascade Middle School Health Center



Nurse Annemaria ready to treat students with asthma

1

Trainsong Neighborhood Trainsong Park



4

JH Baxter / surrounding industries/neighborhood



3

Flakeboard



7